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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/621,706      | 07/17/2003  | H. William B. Wilt   | THOLAM P205US       | 1527             |

20210 7590 03/23/2005

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| EXAMINER |
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BARNEY, SETH E

|          |              |
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| ART UNIT | PAPER NUMBER |
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3752

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/621,706

Applicant(s)

WILT, H. WILLIAM B.

Examiner

Seth Bamey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-8, 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. Claims 1,2, 4, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,447,750 to Weston in view of U.S. Patent No. 6,299,181 to Ericksson, and further in view of U.S. Patent No. 6,234,407 to Knight et al.

Regarding claims 1, 2, 4, and 11, Weston discloses a spraying boom (1 and 2) mounted on an agricultural tractor for chemical spraying, wherein the boom is attached to a frame (tractor body, Figure 6). Additionally the boom and tractor have shock absorbers (26) and means for moving the boom (see column 4 lines 24 to 37), which also act as a dampener (see column 1 lines 55 to 62). Weston does not disclose six tires along the frame with hydraulic drive, suspension mounted to the frame, a support with a first and second end, the shock absorbers disposed between the support and the frame.

Ericksson discloses a vehicle capable of supporting a boom. The vehicle has more than six wheels (21-24, 26, 27, 33, 34), each wheel having a hydraulic drive and suspension including a support arm having a first and second end (71, 83, etc. See Figure 1). One end of the support arm is attached to the frame (32) and the other end is rotatably mounted to the wheels. See Figure 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the boom and tractor of Weston with the wheels and suspension of Ericksson in order to improve the traction and stability over rough terrain.

Weston does not disclose platform extendible actuators being provided between the chemical applicator mounting platform and the frame. Knight discloses a ground-traversing vehicle having extendible actuators (5) being provided between the base and a leveling bar (3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the boom and tractor of Weston with the extendable actuators of Knight in order to easily adjust the boom.

Regarding claim 12, Weston discloses a frame with a front portion and a rear portion, a pivoting joint (18) provided between the two for pivotal movement. See Figure 6.

2. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,447,750 to Weston, U.S. Patent No. 6,299,181 to Ericksson, and U.S. Patent No. 6,234,407 to Knight et al. as applied to claim 1 above, and further in view of U.S. Patent No. 4,515,311 to Takata.

Weston does not disclose that the boom and tractor has a boomless spraying mode or flotation tires. Takata discloses a vehicle with a mounted spray nozzle having flotation tires. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the boom above and tractor of Weston as modified by Ericksson and Knight above, with the spray nozzle and flotation tires of Takata in order to allow the vehicle to produce a common alternative spraying mode and to travel through land and water.

3. Claims 5, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,447,750 to Weston, U.S. Patent No. 6,299,181 to Ericksson, and

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U.S. Patent No. 6,234,407 to Knight et al. as applied to claim 1 above, and further in view of U.S. 6,203,039 to Gorden.

Weston does not disclose the boom and tractor having air bag shock absorbers. Gorden discloses a suspension system using multiple air bags (46) at opposing sides of the frame. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the boom and tractor of Weston, as modified by Ericksson and Knight above, with the air bag suspension of Staurt because it is a common alternative that provides better shock absorbance over rough terrain, and having multiple air bags reduces the load on any single air bag.

The suspension of Ericksson discloses suspension extendible actuators (72). See Figures 1 and 3. As aforementioned it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the boom and tractor of Weston with the wheels and suspension of Ericksson in order to improve the traction and stability over rough terrain.

***Allowable Subject Matter***

4. Claims 13 and 14 are allowed.
5. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 2, 4, and 11 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed January 6, 2005 have been fully considered but they are not persuasive. Regarding applicant's arguments to claim 5, as stated in the abovementioned rejection, the examiner believes the amendment to the claim does not distinguish over the prior art of record.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seth Barney whose telephone number is (571)272-4896. The examiner can normally be reached on 7:30am-5:00pm (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571)272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seth Barney  
Examiner  
Art Unit 3752

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**David A. Scherbel**  
**Supervisory Patent Examiner**  
**Group 3700**